

**Table 4: Natural Thermoluminescence (NTL) Data for Antarctic Meteorites**

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The measurement and data reduction methods were described by Hasan et al. (1987, Proc. 17th LPSC E703-E709); 1989, LPSC XX, 383-384). For meteorites whose TL lies between 5 and 100 krad the natural TL is related primarily to terrestrial history. Samples with NTL <5 krad have TL below that which can reasonably be ascribe to long terrestrial ages. Such meteorites have had their TL lowered by heating within the last million years or so by close solar passage, shock heating, or atmospheric entry, exacerbated, in the case of certain mildly metamorphosed chondrites by anomalous fading. We suggest meteorites with NTL >100 krad are candidates for unusual orbital/thermal histories (Benoit and Sears, 1993, EPSL 120, 463-471).

Samples	Class	NTL [krad at 250 deg. C]	Samples	Class	NTL [krad at 250 deg. C]
GRO95566	C2	0	GRA95211	H6	20.2 +- 0.1
WSG95300	H3.3	6. +- 3	GRO95516	H6	88.2 +- 0.1
GRA95208	H3.7	33.9 +- 0.2	GRO95532	H6	65.7 +- 0.1
GRA95201	H5	153 +- 4	GRO95505	L3.4	5 +- 4
GRA95202	H5	34.8 +- 0.1	GRA95203	L5	46.8 +- 0.1
GRA95204	H5	20.4 +- 0.1	GRA95206	L6	40.0 +- 0.1
GRA95207	H5	17.1 +- 0.1	GRO95510	L6	65.5 +- 0.1
GRA95210	H5	0.16 +- 0.03	GRO95513	L6	7.9 +- 0.1
GRA95212	H5	50.0 +- 0.1	GRO95526	L6	31.8 +- 0.2
GRO95506	H5	17.9 +- 0.3	GRO95528	L6	7.3 +- 0.1
GRO95520	H5	109.7 +- 0.4	GRO95531	L6	0.80 +- 0.1
PRE95400	H5	103 +- 3			

The quoted uncertainties are the standard deviations shown by replicate measurements on a single aliquot.

**COMMENTS:** The following comments are based on natural TL data, TL sensitivity, the shape of the induced TL glow curve, classifications, and JSC and Arkansas group sample descriptions.

GRO95513 and GRO95528 have low induced TL sensitivities relative to Dhajala, and are probably highly shocked.

GRA95208 is confirmed as a type 3.7 (AMN 20:1).

GRO95505 and WSG95300, classified as type 3.6 and type 3.4 respectively (AMN 20:1), are type 3.4 and 3.3.

1. Pairings suggested by TL data:  
 H5: GRA95204 and GRA95207.  
 L6: GRO95513 and GRO95528.